IN THE SPECIFICATION

Please replace the paragraph beginning at page 4, line 17, with the following rewritten paragraph:

In the conventional mixed flow turbine, as shown in Fig. 4B, a gas inlet side edge of the blade 103' is ~~have a~~ linear with a predetermined angle with respect to the ~~rotation axis~~ direction of rotation. The blade attachment angle δ between an end point 106' of a blade 103' on the surface of the hub 102 on the gas inlet side and the line of the radial direction is set to a non-zero value, and is often set to 10-40°. In the case of the radial turbine, the blade attachment angle δ is set to zero. In the mixed flow turbine, the sectional profile of the blade 103' taken out along the line I-I shown in Fig. 4B has a curved (parabolic) shape as ~~the~~ a whole, including the neighborhood of the gas inlet, as shown in Fig. 4A.

Please replace the paragraph beginning at page 5, line 4, with the following rewritten paragraph:

The flow problem in a typical mixed flow turbine at the point B under the condition that the theoretical velocity ratio U/C0 decreases will be described below. Fig. 5 shows a relation between a blade angle βk and a flow angle β. Referring to Fig. 5, the flow angle β_{107} is about 20° and constant at the point B in the radial turbine. The blade angle β_{k108} of the radial turbine is zero and constant. In this example, the incidence i2 is about 20° and the efficiency decreases due to this incidence i2, compared with the maximum efficiency. On the other hand, in the mixed flow turbine, the flow angle β_{109} is about 20° on the side of the shroud but increases to about 40° on the side of the hub. Such a distribution of the flow angle β_{109} is caused ~~from~~ by the characteristic of the mixed flow turbine ~~that~~ because a rotation radius R_{106} is smaller than a rotation radius R_{111}, as shown in Fig. 4C. As shown in Fig. 4C, R_{106} is the rotation radius ~~as~~ at the distance between the end point 106' of the blade 103' on

the hub side on an inlet side blade edge line and the rotation axis L. Also, the rotation radius R_{111} is the rotation radius ~~as~~ at the distance between the end point 111' of the blade 103' on the shroud side on the inlet side blade edge line and the rotation axis L. When the rotation radius R_{106} becomes smaller than the rotation radius R_{111}, as shown in Fig. 6, the rotation velocity U decreases. On the other hand, the circumferential component of the absolute flow velocity C increases ~~in~~ inversely proportional to the radius by ~~the law of~~ conservation of angular momentum, so that the flow angle β_{109} increases to about 40° on the hub side, as shown in Fig. 5. In this way, in the conventional mixed flow turbine, the incidence $I2_{106}$ can be decreased on the side of the hub surface. To measure the increase of the incidence caused by the increase of the flow angle, the blade angle β_{k110} in the mixed flow turbine is set to about 40° on the hub side to approximately coincide with the flow angle. At this time, the incidence is shown by $i2_{113}$.

Please replace the paragraph beginning at page 6, line 16, with the following rewritten paragraph:

In this way, the mixed flow turbine can be designed for the flow angle β and the blade angle β_k to be near to each other on the hub side, and the incidence $i2_{106}$ in the hub side can be made to be near to zero. The mixed flow turbine has such advantages. However, the flow angle β_{109} decreases linearly from the hub side to the shroud side, the blade angle β_{k110} decreases parabolically from the hub side and the shroud side. Therefore, the incidence $i2_{112}$ is increased to a maximum value in a middle point 112 of the gas inlet side blade edge line. ~~A loss~~ The losses in the mixed flow turbine ~~increases~~ increase due to the difference between the distribution of the flow angle and the distribution of the blade angle and the efficiency ~~reduction~~ of the mixed flow turbine is ~~caused~~ reduced due to the increase of the incidence.

Please replace the paragraph beginning at page 7, line 5, with the following rewritten paragraph:

~~It is demanded that the~~ Therefore, a technique ~~which makes~~ to increase the efficiency of ~~the~~ a mixed flow turbine ~~which is~~ operated at a low theoretical velocity ratio U/C0 ~~higher~~ is ~~established~~ needed.

Please replace the paragraph beginning at page 7, line 11, with the following rewritten paragraph:

Therefore, an object of the present invention is to provide a mixed flow turbine and a mixed flow turbine rotor blade which can be operated ~~in~~ at high efficiency at a low theoretical velocity ratio.

Please replace the paragraph beginning at page 7, line 24, with the following rewritten paragraph:

In this case, each of the plurality of rotor blades has first to third points in the curved shape on the leading edge. When the first point is a point where the rotor blade is attached to the hub, the third point is a point ~~which a~~ farther ~~point~~ from the first point, and the second point is a middle point between the first and third points, a rotation radius of the second point from the rotation axis may be larger than that of the first point ~~from the rotation axis~~, and a rotation radius of the third point from the rotation axis may be larger than that of the second point.

Please replace the paragraph beginning at page 8, line 8, with the following rewritten paragraph:

Also, each of the plurality of rotor blades has first to third points in the curved shape on the leading edge. When the first point is a point where the rotor blade is attached to the hub, the third point is a point ~~as a~~ farther ~~point~~ from the first point, and the second point is a middle point between the first and third points, a rotation radius of the second point from the rotation axis may be larger than that of the first point ~~from the rotation axis~~, and the rotation radius of the second point may be larger than that of the third point from the rotation axis.

Please replace the paragraph beginning at page 9, line 26, with the following rewritten paragraph:

In Figs. 7A to 7C, the mixed flow turbine according to an embodiment of the present invention is composed of a rotation blade unit 10, a nozzle 4 and a scroll 2.

Please replace the paragraph beginning at page 10, line 6, with the following rewritten paragraph:

The nozzle ~~11~~ 4 gives absolute velocity indicated in the above-mentioned velocity triangle shown in Fig. 2 to the fluid supplied from the scroll 2, and supplies the fluid to the rotation region of the rotor blade 3.

Please replace the paragraph beginning at page 10, line 10, with the following rewritten paragraph:

The rotor blade unit 10 includes a plurality of blades 3 which are arranged around and fixed to a hub 1 ~~around the hub 1~~. The rotor blade 3 has an inner side edge 206, an outer side edge 211, a gas inlet side edge ~~8~~ 208 and an outlet side edge 209. The inner side edge 206 is

fixed to the surface of the hub [[4]] 1. The outer side edge 211 is rotated around a rotation axis along the inner curved surface of the shroud 20.

Please replace the paragraph beginning at page 10, line 18, with the following rewritten paragraph:

As shown in Fig. 7B, the rotor blade ~~5~~ 3 has a portion extending in the direction orthogonal to the direction of a rotation axis L and a portion extending in the axial direction from the upstream side to the downstream side along a gas flow path in a plan view. As shown in Fig. 7A, the rotor blade ~~5~~ 3 has a shape projecting parabolically in the direction of rotation.

Please replace the paragraph beginning at page 11, line 9, with the following rewritten paragraph:

A rotation radius R_6 at the end point 6 on the hub side of the inlet side edge 208 of the blade 3 is RH ($=R_6$), a rotation radius R_{11} at the end point 11 on the shroud side of the inlet side edge 208 of the blade 3 is RS ($=R_{11}$), and a rotation radius R_{123} at a middle point 123 of the inlet side edge 208 of the blade 3 is RM ($=R_{123}$). The rotation radius of the midpoint on the straight line connecting ~~between~~ the hub side of the inlet side edge 208 ~~and~~ to the shroud side of the inlet side edge 208 is RM*. The end point 11 is situated on the shroud side and has the following relation.

RS > RM > RM* > RH

However, the relation may be set as follows:

RM > RS > RM* > RH.

In this case, it is possible to increase the incidence difference ΔIn further and to decrease the incidence Ina further, as shown in Fig. 8.

Please replace the paragraph beginning at page 11, line 26, with the following rewritten paragraph:

In the mixed flow turbine of the present invention, both ~~of~~ the flow angles β_{15} on the hub side and the shroud side are approximately equal to the flow angles $\underline{\beta}_{109}$ in the conventional mixed flow turbine. However, the distribution of the flow angle β_{15} in the mixed flow turbine of the present invention monotonously decreases from the hub side to the shroud side and swells convexly in the downward direction. The flow angle β_{15} in the mixed flow turbine of the present invention is smaller than the flow angle β_{109} in the conventional mixed flow turbine.

Please replace the paragraph beginning at page 12, line 10, with the following rewritten paragraph:

Because of the inlet side edge 208 which convexly swells toward the upstream side, as shown in Fig. 9, the following feature is added to the flow angle $\underline{\beta}_{15}$ at the middle point 123 of the gas inlet side edge 208 when the operation point is the theoretical velocity ratio B point.

Please replace the paragraph beginning at page 12, line 24, with the following rewritten paragraph:

The incidence of the mixed flow turbine of the present invention is further smaller than that of the conventional mixed flow turbine which has been improved <u>compared to</u> the conventional radial turbine. Through such an improvement of the incidence, as shown in Fig. 9, the theoretical velocity ratio U/C0 at the maximum efficiency point of the mixed flow turbine of the present invention is smaller than the theoretical velocity ratio U/C0 at the

maximum efficiency point of the conventional mixed flow turbine. As a result, the mixed flow turbine of the present invention can be operated at the higher efficiency point B' at the theoretical velocity ratio point B.